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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,670

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Larry Fossett

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HARRINGTON & SMITH, PC
4 RESEARCH DRIVE
SHELTON, CT 06484-6212

EXAMINER

NGUYEN, HOANG V

ART UNIT

PAPER NUMBER

2821

MAIL DATE

DELIVERY MODE

11/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,670

Applicant(s)

FOSSETT, LARRY

Examiner

Hoang V. Nguyen

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29, 32 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 30, 31 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/7/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 5, 6, 8, 10-12, 14-16, and 18-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Klemens et al (US 6,239,755 B1).

Regarding claim 1, Klemens (Figures 6A and 6B, col 5 line 54 through col 6 line 17) discloses a system that facilitates mobile communications comprising a transceiving antenna component 606 that is coupled to a first wireless communication device 616, the transceiving antenna component for receiving a modulated signal from the first wireless communication device; and an extendable antenna component 604 that is coupled to the transceiving antenna component via a nongalvanic interface, the transceiving antenna component for conveying the modulated signal to the extendable antenna component via electromagnetic induction, the extendable antenna component for transmitting the signal to at least one other wireless communication device.

Regarding claim 2, as applied to claim 1, Figure 6A of Klemens shows that the transceiving antenna component comprises an active stub.

Regarding claim 4, as applied to claim 2, Figure 6A of Klemens shows that the transceiving antenna element 606 comprises at least one of a meander line conductor and a helical conductor.

Regarding claim 5, as applied to claim 1, Figure 6A of Klemens shows that the extendable antenna 604 component is a parasitic whip.

Regarding claim 6, as applied to claim 1, Klemens (col 5 line 54 through col 6 line 17) teaches that the extendable antenna 604 component is tuned to operate at a frequency based on a length of the extendable antenna component and an amount of overlap between the transceiving antenna component and the extendable antenna component.

Regarding claim 8, as applied to claim 1, Klemens (col 5 line 54 through col 6 line 17) teaches that the extendable antenna component is detuned via positioning the extendable antenna component in a retracted location relative to the transceiving antenna component.

Regarding claim 10, as applied to claim 1, Figure 6A of Klemens shows that the antenna system is disposed within one of a cellular phone, a PDA, a handheld computer, a notebook computer, and a pager.

Regarding claim 11, as applied to claim 1, Klemens (col 5 line 54 through col 6 line 17) teaches that the extendable antenna component further receives a signal from at least one other wireless communication device, the signal is inductively transferred to the transceiving antenna component, which conveys the signal to the first wireless communication device.

Regarding claim 12, Klemens (Figures 6A and 6B, col 5 line 54 through col 6 line 17) discloses a multi-frequency antenna for a mobile device comprising an active stub 606 tuned to resonate at multiple frequencies; and a parasitic whip 604 coupled to the active stub, the parasitic whip for receiving a signal resonating within the tuned frequency band of the active stub and for inductively transferring the signal to the active stub, the active stub coupling the transferred signal to the mobile device's processing circuitry.

Regarding claim 14, as applied to claim 12, Figure 6A of Klemens shows that the active stub comprises a helical conductor, and the parasitic whip is aligned through approximately the center of the helical conductor.

Regarding claim 15, as applied to claim 12, Figure 6A of Klemens shows that the system is disposed within one of a cellular phone, a PDA, a handheld computer, a notebook computer, and a pager.

Regarding claim 16, as applied to claim 12, Klemens (Figures 6A and 6B, col 5 line 54 through col 6 line 17) teaches that the parasitic whip is tuned to the frequency based on an amount of overlap with the active stub and a size of the parasitic whip.

Regarding claim 18, as applied to claim 12, Klemens (col 5 line 54 through col 6 line 17) teaches that the parasitic whip is detuned via retracting the parasitic whip relative to the active stub.

Regarding claim 19, as applied to claim 12, Klemens (col 5 line 54 through col 6 line 17) teaches that the parasitic whip further inductively receives a signal from the active stub and transmits the signal to at least one other mobile device.

Regarding claims 20-26, the antenna system of Klemens (Figures 6A and 6B, col 5 line 54 through col 6 line 17) would enable the method for transmitting a radio frequency signal from a wireless communications device as claimed.

3. Claims 27, 29, 32, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Moller et al (US 5,995,050).

Regarding claim 27, Moller (Figure 4, claim 15) discloses an extendable antenna component 406 inductively coupled to the fixed antenna component 404 in an extended position

via an overlap extending at least about 4 mm between the fixed and extendable antenna components, and decoupled from the fixed antenna component in a retracted position.

Regarding claim 29, as applied to claim 27, Moller (claim 15) teaches that the extendable antenna component is decoupled from the fixed antenna component by a detuning circuit.

Regarding claim 32, as applied to claim 27, Moller (Figure 5) further comprising a printed wiring board comprising transceiver circuitry coupled to the fixed antenna component, the extendable antenna coupled to the transceiver circuitry only through the fixed antenna component and only when said extendable antenna component is in the extended position.

Regarding claim 34, as applied to claim 27, Moller teaches that the extendable antenna component operates in the extended position to widen a bandwidth of the fixed antenna element.

Regarding claim 35, as applied to claim 27, Figure 4 of Moller shows that the extendable antenna component comprises one of a quarter wavelength whip, a three-eighths wavelength whip, and a five-eighths wavelength whip.

Regarding claim 36, as applied to claim 27, Figure 4 of Moller shows that the apparatus being disposed within a mobile telephone, the mobile telephone further comprising a display and a keypad.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moller.

Moller discloses the claimed invention except mentioning that the overlap extends between about 4-6 mm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the overlap to be between 4-6 mm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 627 F.2d 272, 205 USPQ 215 (CCPA 1980).

Double Patenting

6. Claims 1-26 of this application conflict with claims 1-26 of Application No. 10/783,661. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/783,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose a system comprising an extendable antenna component that is coupled to a transceiving antenna component via a non-galvanic interface.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

9. Claims 30, 31 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 30, Moller fails to further teach, in combination with other limitations, that the detuning circuit is disposed on a printed wiring board, the printed wiring board operating as a ground plane to the fixed antenna component.

Regarding claim 31, Moller fails to further teach, in combination with other limitations, that the extendable antenna component is decoupled from the fixed antenna component by a non-conductive portion of the extendable antenna component overlapping with the fixed antenna component while in the retracted position.

Regarding claim 33, Moller fails to further teach, in combination with other limitations, that the fixed antenna component is coupled to a printed wiring board that serves as a ground plane to the fixed antenna component, the extendable antenna component disposed so as to lie alongside the printed wiring board while in the retracted position.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 6,069,592 discloses retractable antenna element coupled with a meandering antenna element.

- US 5,969,684 discloses a capacitive coupled extendable antenna for portable communication devices.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825. The examiner can normally be reached on Mondays-Fridays from 8:00 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hvn
11/15/07

/Hoang V Nguyen/
Primary Examiner, AU 2821